REMARKS/ARGUMENTS

Reconsideration of the application is requested.

Claims 10-12 and 14-22 are now in the application. Claims 10, 11, and 14-16 have been amended. Claim 13 has been canceled.

Claim Amendments:

The subject matter of claim 13 has been incorporated into claim 10. According to the amended claim, the lens unit has a base lens and the base lens is in direct contact with the housing. The direct contact causes the lens unit to be supported by the housing. Reference is had to the drawing Fig. 1, where the lens 16 is in direct contact with the housing 13 by way of the area 16a.

Claim 11 has been amended in response to the rejection under 35 U.S.C. § 112. The dependencies of claims 14, 15 have been adapted to the cancellation of claim 13.

Claim 16 has been amended as well. As illustrated in Fig. 1, there is no contact between the lens holder 14 and the housing 13. The lens holder 14 is supported on the circuit carrier 10.

Drawing Objection

The objection to the drawing on page 2 is well taken. Reference numeral "34" has been removed from the enclosed corrected drawing figures. The entry of the new drawing is requested.

Claim Rejections – 35 U.S.C. § 112

Claim 11 has been amended. It is believed that the amended claim 11 satisfies the requirements of Section 112.

Claim Rejections – 35 U.S.C. § 102

We now turn to the art rejection, in which claims 10-15 and 19-22 have been rejected as being anticipated by Tansho et al. (US 2003/0184885 A1, hereinafter "Tansho") under 35 U.S.C. § 102(e) and claims 10 and 16-18 have been rejected as being anticipated by Hunter et al. (US 7,088,397 B1, hereinafter "Hunter") under 35 U.S.C. § 102(e). We request reconsideration on the basis of the amended claims.

Tansho does not show a semiconductor element disposed in a housing. Reference numeral 304 denotes a lens frame. The image sensor 2 of Tansho does not have a housing.

We base this statement on the convention, as understood by those of skill in the art, that a "semiconductor element disposed in a housing" is one single electronic component. For the construction of an optical module comprising such an element, the semiconductor element and the housing are not handled separately. It is quite clear, of course, that the interfaces and the disposition of a semiconductor element disposed in a housing and a semiconductor element without a housing are fundamentally different from each other. It is respectfully pointed out, therefore, that Tansho's image pickup device is not in fact pertinent state of the art.

It is also pointed out that anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 221 USPQ 385 (Fed. Cir. 1984). W.L. Gore and Assoc., Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303 (Fed. Cir. 1983). In other words, a claim is anticipated if a single reference, either expressly or inherently, discloses every limitation of the claim at issue. In re Schreiber, 128 F.3d 1473 (Fed. Cir. 1997).

Here, Tansho does not disclose, either expressly or under the principles of inherency, a semiconductor element in a housing. Tansho, therefore, does not anticipate the invention of claim 10.

The rejection over **Hunter** appears to be moot because the subject matter of claim 13 has been incorporated into claim 10. According to the amended claim 10, the lens is directly supported by the housing of the semiconductor element. Contrary to this feature, Hunter uses a lens holder 418 with attachment features 460. The attachment features are attached to, or supported by, the package structure 402 of the image sensor 410. The package structure houses the image sensor. Col. 4, line 53.

According to Hunter, a lens holder is disposed between the lens and the housing of the image sensor. Hunter, therefore, does not partake in the advantage of the construction according to the claimed invention of not having any component between the lens and the housing of the semiconductor element. The advantages of

such an "omission" are described in the specification of instant application.

Reference is had to the translated description on page 2, third paragraph, and page 4, first paragraph:

> In order for a camera system consisting of an image sensor (currently CCD or CMOS) and a lens system to achieve an adequate sharpness of image, the sensor and optics components must be compatible with each other in a manner which is geometrically very accurate. The tolerance range for the distance from camera chip to optics system in the z-axis is usually in the range of a few hundredths of a millimeter, in order to achieve an optimally sharp image for a specific focal depth range. This is problematic for so-called fixed-focus systems in particular, since these may be at best moderately subject to tolerances during manufacturing. An offset of the camera chip in relation to the optics system in the x-axis or y-axis also has the consequence that the optical system "squints" under certain circumstances, i.e. the image is cut off at one edge (horizontal or vertical) in each case because no more pixels are present there as a result of the offset, and said pixels should be available for precautionary reasons.
>
> One possibility for developing a focus-free sstem is to reduce the total number of possible tolerances and elements, such that the module or system functions without adjustment at least within a specific range of distances and temperatures by virtue of its design. When using the invention e.g. in the context of a passenger protection system in a motor vehicle, to which the present invention is not restricted, however, it should be possible to guarantee sharp images at distances of e.g. 15 cm to 130 cm and at temperatures of e.g. -40°C to + 105°C. The fewer the elements in the tolerance chain, the more readily this can be implemented. In the case of packaged semiconductor elements, a large part of the tolerance chain relates in particular to the required soldered joints and possibly adhesive joints or similar between chip and circuit mounting.

As explained in that text, the optical module of the claimed invention leads to a reduction in tolerance, to wit:

- During assembly: the clip mechanism of Hunter results in larger tolerances than the direct support of the lens of our invention.

- During deployment of the optical module: the more components are used, the larger the temperature-dependent expansion and therefore the larger the tolerances.

In summary, none of the references, whether taken alone or in any combination, either show or suggest the features of claim 10. Claim 10 is, therefore, patentable over the art and since all of the dependent claims are ultimately dependent on claim 10, they are patentable as well.

In view of the foregoing, reconsideration and allowance of claims 10-12 and 14-22 are solicited.

Respectfully submitted,

For Applicant

WERNER H. STEMER
REG. NO. 34,956

WHS:lq

February 13, 2007

Lerner Greenberg Stemer LLP
P.O. Box 2480
Hollywood, Florida 33022-2480
Tel.: 954·925·1100
Fax: 954·925·1101

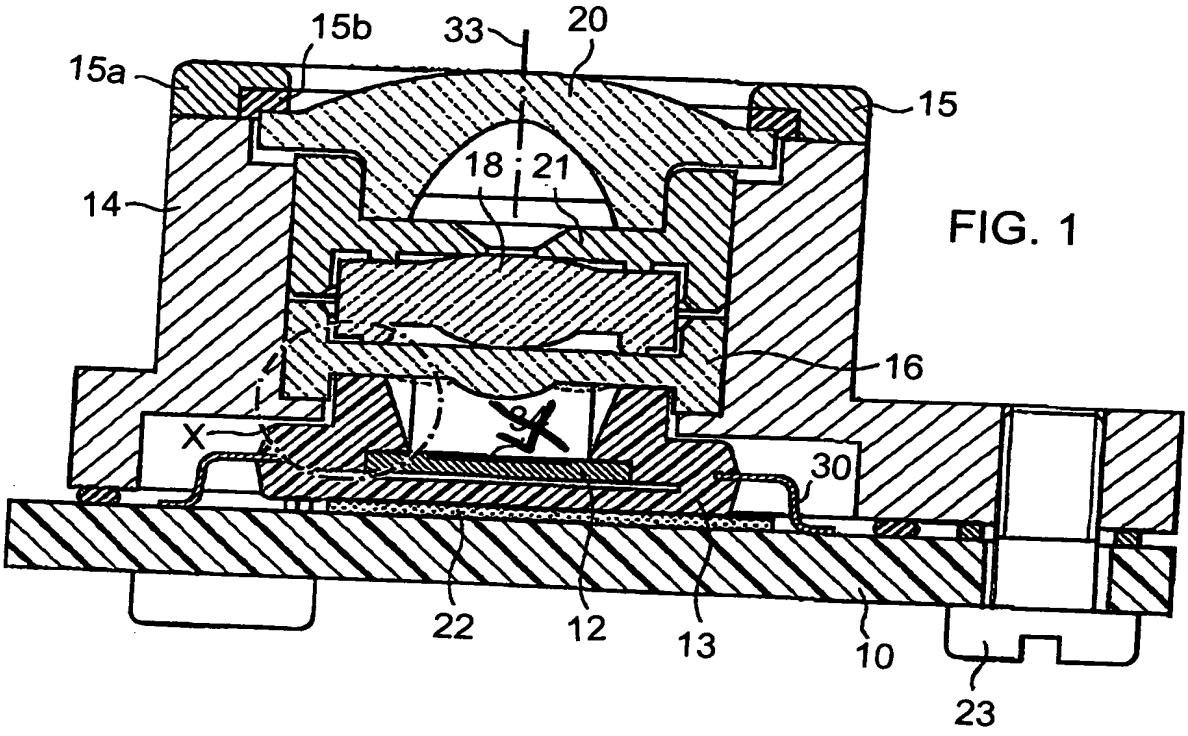
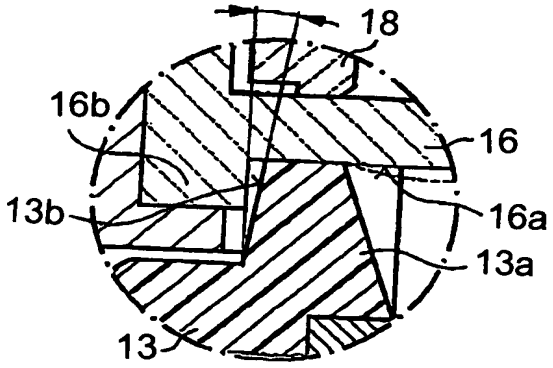


FIG. 1

FIG. 2



2 / 2

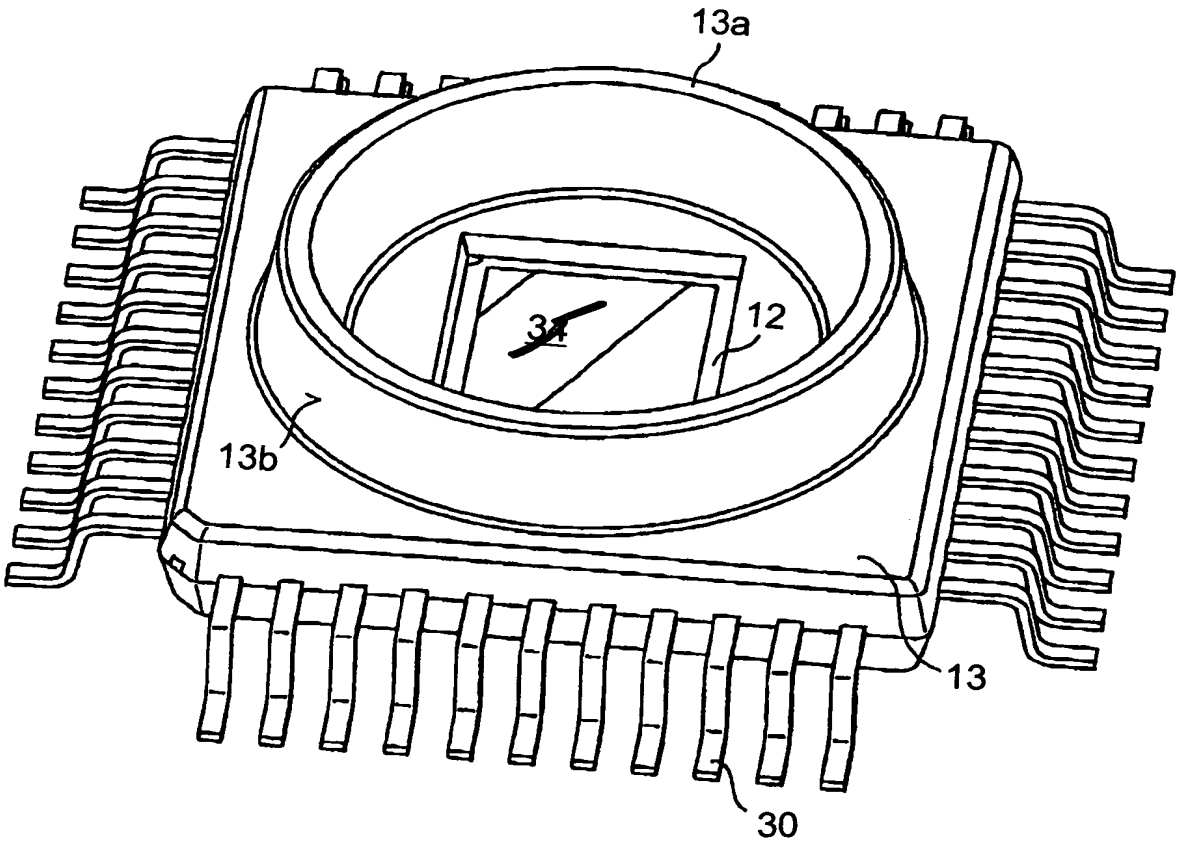


FIG. 3